

REMARKS/ARGUMENTS

This reply is responsive to an Office Action dated February 9, 2005. Reconsideration and allowance of the application and presently pending claims 1-38 are respectfully requested.

Present Status of the Patent Application

Claims 1-38 remain pending in the present application. Claims 1-38 have been rejected. Claims 25 and 37 have been amended.

Drawings

The drawings were objected to as failing to comply with 37 C.F.R. 1.84(p)(5) because they do not include a reference sign for element 10 mentioned in the description. Applicant has submitted an amended replacement drawing sheet for FIGS. 1A and 1B including a reference sign for element 10 in both drawings to overcome this objection.

Specification

The specification has been amended to provide the Serial No. on page 1.

Information Disclosure Statement

The references listed in the specification are articles relating to various diagnostic techniques contemplated for assessing brain function, and are as such not prior art to the system and method of the present invention.

Claim Rejections - 35 U.S.C. §112

Claims 25-36 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim that the subject matter which Applicant regards as the invention in connection with the

recitation "ultra high spatial resolution". Claim 25 has been amended to overcome this rejection. Therefore, claim 25 and its dependent claims are clear and definite as amended.

Claim Rejections - 35 U.S.C. §102

Claim 37 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Hoenig (U.S. Patent No. 4,996,479). Applicants respectfully traverse this rejection.

For a proper rejection of a claim under 35 U.S.C. §102(b), the cited reference must disclose all elements/features/steps of the claim. See, e.g., *E.I. du Pont Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 USPQ2d 1129 (Fed. Cir. 1988).

Independent Claim 37

Independent claim 37, as amended, is allowable for at least the reason that Hoenig does not disclose, teach, or suggest "supporting the head on a headrest assembly including a headrest mounted on a portable cart."

In this regard, the Examiner acknowledges that the Hoenig patent does not disclose a portable cart. Accordingly, the rejection is deficient in this area. Therefore, the Hoenig patent fails to teach or disclose the invention as defined by claim 37, and the rejection of claim 37 as amended should be withdrawn. Thus, claim 37 patentably distinguishes over Hoenig.

Furthermore, as will be discussed in more detail below, Applicants believe none of the other cited references can be combined with Hoenig to achieve portability.

Claim Rejections – 35 U.S.C. § 103

As to the average coronal and sagittal radii of curvature for both adults and infants, this information is being obtained from the Applicants. This information will be filed promptly upon receipt by the undersigned.

Claims 1-5, 9, and 21-24 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hoenig in view of Jonsen (U.S. Patent No. 5,036,279). Applicants respectfully traverse this rejection.

Independent Claim 1

Independent claim 1 is allowable for at least the reason that neither Hoenig nor Jonsen disclose, teach, or suggest “a portable cart for moving along the ground.”

In this regard, the Examiner acknowledges that the Hoenig patent does not disclose a portable cart, but makes reference to the teaching of the Jonsen patent. The Office Action has cited col. 2, lines 20-26 and claim 1:

In FIG. 1, a NMR/NQR spectrometer 10 which operates at liquid nitrogen temperatures is shown within the confines of a portable box 12 which also constitutes the faraday shielding on the spectrometer.

Inside the spectrometer 10, a liquid nitrogen cryogen container 14, a dc power supply 16 and a computer 18 are arranged interconnected with each other.

[col. 2, lines 20-26]

1. A spectrometer which operates at liquid nitrogen temperatures comprising:
 - a portable box constituting faraday shielding for said spectrometer;
 - a container to hold a liquid nitrogen cryogen, wherein said container is situated within the confines of said box; and
 - a high temperature direct current superconducting quantum interference device (SQUID) made from mixed oxides of Lanthanide, copper, and barium, wherein said SQUID is also situated within the confines of said box.

As can be verified from a review of these cited portions of Jonsen, the device operates with liquid nitrogen temperatures using a high temperature dc SQUID. The high temperature dc SQUIDs have a superconducting transition temperature of greater than 77 K allowing for the use of liquid nitrogen. In contrast, the Hoenig patent discloses using liquid helium which allows cooling to near absolute zero. Low temperature dc SQUIDs have a superconducting transition temperature of approximately 4 K. Furthermore, the Jonsen patent states at col. 1, lines 27-36 the following:

The typical dc SQUID is a small device. However, conventional dc SQUID'S operate at liquid Helium temperatures (4.2 K). To construct a NMR or NQR Spectrometer requires a Helium cryostat in which to hold the SQUID and detection systems. In order to achieve adequate shielding and supply of liquid helium, this cryostat is quite large and **not portable**. Furthermore, to achieve further shielding from stray radio frequency fields, the SQUID detector has to be placed within a faraday cage.

[Emphasis added.]

Since Hoenig discloses using liquid helium and Jonsen teaches away from the portability of liquid helium cryostats, it would not have been obvious to combine these two references. Therefore, Hoenig and Jonsen do not disclose "a portable cart for moving along the ground."

Accordingly, the rejection is deficient in this area. Notwithstanding, the undersigned has reviewed the entirety of these references and has failed to identify any such teaching anywhere within these references. Accordingly, the Hoenig and Jonsen patents fail to teach or disclose the invention as defined by claim 1, and the rejection of claim 1 should be withdrawn.

Claims 1-9, 16, 17, and 38 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hoenig in view of Dilorio et al. (U.S. Patent No. 5,442,289). Applicants respectfully traverse this rejection.

Independent Claim 1

Independent claim 1 is allowable for at least the reason that neither Hoenig nor Dilorio disclose, teach, or suggest "a portable cart for moving along the ground."

In this regard, the Examiner acknowledges that the Hoenig patent does not disclose a portable cart, but makes reference to the teaching of the Dilorio patent. The Office Action has cited col. 10, lines 8-18:

... The use of connector 56 between the tube 72 and the lead 58 allows the entire tube array 72, array of pickup coils 12, and first container 14 to be disconnected and replaced with another unit without bringing the detector 30 to ambient temperature, which was impossible with the apparatus illustrated in the '355 patent.

As can be verified by a review of this cited portion of Dilorio in view of FIG. 1, Dilorio discloses this connector for the portion of the device utilizing liquid nitrogen as opposed to liquid helium. The significance of this difference has been discussed above in reference to claim 1. Furthermore, Dilorio states at col. 9, lines 34-48:

... The important point is that, using the approach of the invention, the detector which may require an operational temperature near absolute zero, is physically separated from the pickup coils, which need only be operated in the superconducting state and not necessarily near absolute zero, and connected with a lead system that also need only be operated in the superconducting state and not necessarily near absolute zero. Using high temperature superconductors having superconducting transition temperatures above 77K, the structure used to maintain the pickup coil and the lead system at or below the superconducting temperature is much simpler and less bulky than the structure used to maintain the detector near absolute zero.

Dilorio does not disclose any portability for the portion of their device utilizing liquid helium as shown in FIG. 1. In fact, Dilorio appears to teach away from portability for any device utilizing liquid helium. Since Hoenig discloses using liquid helium and Dilorio teaches away from the portability of liquid helium devices, it would not have been obvious to combine these two references. Therefore, Hoenig and Dilorio do not disclose "a portable cart for moving along the ground."

Claims 10-15, 20, and 25-36 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hoenig in view of Dilorio et al. and further in view of Yokosawa et al. (U.S. Patent No. 5,166,614). Applicants respectfully traverse this rejection.

Independent Claim 25

Independent claim 25 is allowable for at least the reason that Dilorio would not obviously have been combinable with either Hoenig or Yokosawa, because the Dilorio structure utilizes liquid nitrogen and the devices for both Hoenig and Yokosawa discloses the use of liquid helium. The uses of these liquids are not interchangeable as described above regarding claim 1. Accordingly, the Hoenig, Dilorio, and Yokosawa patents fail to teach or disclose the invention as defined by claim 25, and the rejection of claim 25 should be withdrawn.

Dependent Claims

Dependent claims 2-24, 26-36, and 38 are believed to be allowable for at least the reason that these claims depend from allowable independent claims 1, 25, and 37, respectively. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and rejections have been traversed, rendered moot, and/or accommodated, and that now pending claims 1-38 as amended are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned at 619-231-3666.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date: May 9, 2005

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IN THE DRAWINGS:

An amended replacement drawing sheet for FIGS. 1A and 1B is attached to this response. This sheet, which includes FIGS. 1A and 1B, replaces the original sheet including FIGS. 1A and 1B. In FIGS. 1A and 1B, previously omitted reference character 10 has been added.

IN THE SPECIFICATION:

Please amend the first paragraph under Related Applications on page 1 as follows:

The present application is related to U.S. patent application entitled "HIGH-RESOLUTION MAGNETOENCEPHALOGRAPHY SYSTEM, COMPONENTS, AND METHOD," filed June 26, 2003, Serial No. [] 10/609,259, which is incorporated herein by reference.